## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (currently amended) A method of providing information about a real-world space, comprising ~~the steps of~~:

(a) as ~~the or each of at least one~~a user moves through said space, depositing and storing virtual markers that are not specific to the user ~~are deposited and stored~~ to indicate associated locations visited by the user in the space; and

(b) using data about the stored markers of multiple locations~~is used~~ to provide an information item relevant to use of the space;

wherein in ~~step (a)~~depositing and storing virtual markers, said markers are of more than one type, and ~~in step (b)~~wherein said data used to provide an information item comprises data about stored markers of a specific type or combinations of types selected in dependence on the nature of the information item to be provided.

2. (original) A method according to claim 1, wherein multiple types of virtual marker are deposited in respect of a said user moving through the space.

3. (original) A method according to claim 2, wherein conditions determining the deposition of markers of one of said multiple types of virtual marker differ from conditions determining the deposition of markers of another of said multiple types of marker.

4. (original) A method according to claim 3, wherein the virtual markers of said one type are deposited automatically at one of:

-predetermined intervals of time;

-predetermined intervals of distance; and

-predetermined locations in said space;

whilst the virtual markers of said another type are deposited at a different one of said predetermined intervals of time, predetermined intervals of distance, and predetermined locations in said space.

5. (original) A method according to claim 2, wherein markers of more than one of said multiple types of markers are simultaneously deposited.

6. (original) A method according to claim 1, wherein there are multiple users and for each of at least some of these users only one type of marker is deposited with this type being different for each of at least two such users.

7. (currently amended) A method according to claim 1, wherein the virtual markers deposited in respect of multiple said users are aggregated by type, in dependence on their associated locations, either when being stored or subsequently; the data used ~~in step (b)~~ to provide an information item comprising data about the aggregated markers of said specific type or combinations of types.

8. (currently amended) A method according to claim 7, wherein the virtual markers each have an initial strength value and the strength values associated with the stored markers, either taken individually before aggregation or in location-dependent aggregations, are caused to decay with time; the data used ~~in step (b)~~ to provide an information item comprising data about the current strength of the aggregated markers of said specific type or combinations of types.

9. (currently amended) A method according to claim 1, wherein virtual markers of a first said type are deposited with a first strength value and virtual markers of a second said type are deposited with a second strength value different from said first value; the deposited virtual markers of said first and second types having their strength values aggregated together in dependence on their associated locations, either when being stored or subsequently; and the data used ~~in step (b)~~ to provide an information item comprising data about the aggregated strength values of the markers of said first and second types.

10. (currently amended) A method according to claim 9, wherein the strength values associated with the stored markers of said first and second types, either taken individually before aggregation or in location-dependent aggregations, are caused to decay with time; the data used ~~in step (b)~~to provide an information item comprising data about the current aggregated strength values of the markers of said first and second types.

11. (original) A method according to claim 9, wherein said at least one user comprises visitors to said space and a party with responsibility for the space, markers of the first type of markers being deposited in respect of each visitor and markers of the second type being deposited in respect of said party, said second strength value being greater than said first strength value.

12. (original) A method according to claim 9, wherein said at least one user comprises visitors to said space and a party with responsibility for the space, markers of the first type of markers being deposited in respect of each visitor and markers of the second type being deposited in respect of said party, the first and second strength values being of opposite sign.

13. (currently amended) A method according to claim 1, wherein the virtual markers each have an initial strength value and the strength values associated with the stored markers, either taken in location-dependent aggregations or individually, are caused to decay with time; the data used ~~in step (b)~~ to provide an information item comprising the current strength values of the stored markers of said specific type or combinations of types, either taken in aggregation or individually.

14. (original) A method according to claim 13, wherein markers of the same type have the same initial strength, there being at least two marker types with different respective initial strength values.

15. (original) A method according to claim 13, wherein markers of the same type are decayed at the same rate, there being at least two marker types with different respective decay rates.

16. (original) A method according to claim 1, wherein said virtual markers comprise markers of at least one of the following types:

-markers deposited at predetermines intervals of time or distance;

-feature markers deposited at features of interest in said space;

-tour markers deposited in respect of a user who has responsibility for setting routes through the space;

-group markers deposited in respect of users who are members of a predetermined group of users.

17. (original) A method according to claim 1, wherein the said virtual markers deposited in respect of the or each user are deposited by a mobile device carried by the user.

18. (original) A method according to claim 17, wherein the virtual markers are stored in a central system.

19. (original) A method according to claim 1, wherein the said virtual markers are deposited and stored by an infrastructure system that monitors the location of the or each user.

20. (currently amended) A method according to claim 1, wherein ~~step (b) comprises presenting, as~~ said information item comprises~~,~~ an image of a virtual landscape defined by the relative strengths of location-dependent aggregations of markers of at least one type mapped to a representation of the space.

21. (currently amended) A method according to claim 1, wherein ~~in step (b)~~ said information item comprises information about a path through the space, this information

being derived by determining a path that follows or avoids either ridges or troughs in a virtual landscape defined by the relative strengths of location-dependent aggregations of markers of at least one said type.

22. (currently amended) A method according to claim 1, wherein in step (b) said information item comprises information about a path through the space, this information being derived by determining a path that follows tour-type markers that have been deposited in respect of a user who has responsibility for setting routes through the space.

23. (currently amended) A method according to claim 1, wherein in step (a)depositing and storing virtual markers comprises depositing a feature-type virtual marker is deposited whenever a said user visits a location corresponding to a feature of interest in the space; using data about the stored markers of multiple locations to provide an information itemstep (b) involving using data on the size of feature-specific aggregations of feature-type markers to provide, as said information item, information about the relative popularity of the features concerned.

24. (currently amended) A method according to claim 1, wherein depositing and storing virtual markers in step (a) comprises depositing a feature-type virtual marker is deposited upon a said user requesting, whilst at a location corresponding to a feature of interest in the space, to be presented with a media item concerning that feature; using data about the stored markers of multiple locations to provide an information itemstep (b) involving using data on the size of feature-specific aggregations of feature-type markers to provide, as said information item, information about the relative popularity of the features concerned.

25. (currently amended) A method according to claim 1, wherein using data about the stored markers of multiple locations to provide an information itemstep (b) is effected for a further user moving through the space with said information item being provided to that user.

**26.** (currently amended) Apparatus for providing information about a real-world space, the apparatus comprising:

-a first arrangement arranged to deposit and store virtual markers to indicate associated locations visited by the or each of at least one user in the space, said markers being of more than one type and not specific to a said user; and

-a second arrangement comprising a data-processing system arranged to selectively use data about the stored markers of multiple locations and of a specific type or combinations of types, to provide an information item relevant to use of the space, said specific type or combinations of types being selected in dependence on the nature of the information item to be provided.

**27.** (original) Apparatus according to claim 26, wherein the first arrangement is arranged to deposit multiple types of virtual marker in respect of a said user moving through the space.

**28.** (original) Apparatus according to claim 27, wherein the first arrangement is arranged to deposit markers upon certain conditions being satisfied, the conditions determining the deposition of markers of one of said multiple types of virtual marker differing from the conditions determining the deposition of markers of another of said multiple types of marker.

**29.** (original) Apparatus according to claim 28, wherein the first arrangement is arranged to deposit the virtual markers of said one type automatically at one of:

-predetermined intervals of time;

-predetermined intervals of distance; and

-predetermined locations in said space;

the first arrangement being further arranged to deposit the virtual markers of said another type at a different one of said predetermined intervals of time, predetermined intervals of distance, and predetermined locations in said space.

30. (currently amended) Apparatus according to claim 37~~27~~, wherein the first arrangement is arranged to simultaneously deposit markers of more than one of said multiple types of markers.

31. (original) Apparatus according to claim 26, wherein for each of at least two said users the first arrangement is arranged to deposit markers in respect of multiple users such that for each of at least some of these users only one type of marker is deposited with this type being different for each of at least two such users.

32. (original) Apparatus according to claim 26, further comprising an aggregation arrangement arranged to aggregate by type, and in dependence on their associated locations, the virtual markers deposited in respect of multiple said users, the aggregation arrangement being arranged to carry out this aggregation either when the markers are being stored by the first arrangement or subsequently; the second arrangement being arranged to use, as said data, data about the aggregated markers of said specific type or combinations of types.

33. (currently amended) Apparatus according to claim 32, wherein the first arrangement is arranged to deposit the markers with initial strength values, the apparatus further comprising a decay arrangement arranged to decay with time the strength values associated with the stored markers, either taken individually before aggregation or in location-dependent aggregations; the <u>data-processing system of the</u> second arrangement being arranged to use, as said data, data about the current strength of the aggregated markers of said specific type or combinations of types.

34. (currently amended) Apparatus according to claim 26, wherein the first arrangement is arranged to deposit virtual markers of a first said type with a first strength value and virtual markers of a second said type with a second strength value different from said first value; the apparatus further comprising an aggregation arrangement arranged to aggregate together the strength values of the deposited virtual markers of said first and second types in dependence on their associated locations, either when being stored or

subsequently; the <u>data-processing system of the</u> second arrangement being arranged to use, as said data, data about the aggregated strength values of the markers of said first and second types.

35. (currently amended) Apparatus according to claim 34, wherein the apparatus further comprises a decay arrangement arranged to decay with time the strength values associated with the stored markers of said first and second types, either taken individually before aggregation or in location-dependent aggregations; the <u>data-processing system of the</u> second arrangement being arranged to use, as said data, data about the current aggregated strength values of the markers of said first and second types.

36. (original) Apparatus according to claim 34, wherein the first arrangement is arranged to deposit markers of said first type in respect of visitors to said space and to deposit markers of said second type in respect of a party with responsibility for the space, said second strength value being greater than said first strength value.

37. (original) Apparatus according to claim 34, wherein the first arrangement is arranged to deposit markers of said first type in respect of visitors to said space and to deposit markers of said second type in respect of a party with responsibility for the space, the first and second strength values being of opposite sign.

38. (currently amended) Apparatus according to claim 26, wherein the first arrangement is arranged to deposit said virtual markers each with an initial strength value, the apparatus further comprising a decay arrangement arranged to decay with time the strength values associated with the stored markers, either taken in location-dependent aggregations or individually; the <u>data-processing system of the</u> second arrangement being arranged to use, as said data, data about the current strength values of the stored markers of said specific type or combinations of types, either taken in aggregation or individually.

39. (original) Apparatus according to claim 38, wherein the first arrangement is so arranged that markers of the same type have the same initial strength, there being at least two marker types with different respective initial strength values.

40. (original) Apparatus according to claim 38, wherein the decay arrangement is so arranged that markers of the same type are decayed at the same rate, there being at least two marker types with different respective decay rates.

41. (currently amended) Apparatus according to claim 26, wherein the first arrangement is arranged to deposit virtual markers of at least one of the following types:

-normal markers arranged to be deposited at ~~predetermines~~ predetermined intervals of time or distance;

-feature markers arranged to be deposited at features of interest in said space;

-tour markers arranged to be deposited in respect of a user who has responsibility for setting routes through the space;

-group markers arranged to be deposited in respect of users who are members of a predetermined group of users.

42. (original) Apparatus according to claim 26, wherein the first arrangement comprises a mobile device for carrying by the or each user, each mobile device being arranged to deposit said virtual markers in respect of the associated user.

43. (original) Apparatus according to claim 42, wherein the first arrangement further comprises a central system for storing the virtual markers.

44. (original) Apparatus according to claim 26, wherein the first arrangement comprises an infrastructure system for monitoring the location of the or each user and for depositing and storing virtual markers in respect of the or each user.

45. (currently amended) Apparatus according to claim 26, wherein the data-processing system of the second arrangement is arranged to pr~~esent~~ovide, as said

information item, an image of a virtual landscape defined by the relative strengths of location-dependent aggregations of markers of at least one type mapped to a representation of the space.

46. (currently amended) Apparatus according to claim 26, wherein the data-processing system of the second arrangement is arranged to derive, as said information item, information about a path through the space by determining a path that follows or avoids either ridges or troughs in a virtual landscape defined by the relative strengths of location-dependent aggregations of markers of at least one said type.

47. (currently amended) Apparatus according to claim 26, wherein the data-processing system of the second arrangement is arranged to derive, as said information item, information about a path through the space by determining a path that follows tour-type markers that have been deposited in respect of a user who has responsibility for setting routes through the space.

48. (currently amended) Apparatus according to claim 26, wherein the first arrangement is arranged to deposit a feature-type virtual marker whenever a said user visits a location corresponding to an item of interest, the data-processing system of the second arrangement being arranged to use data on the size of feature-specific aggregations of feature-type markers to provide, as said information item, information about the relative popularity of the features concerned.

49. (currently amended) Apparatus according to claim 26, wherein the first arrangement is arranged to deposit a feature-type virtual marker upon determining that a said user is at a location corresponding to a feature of interest in the space and has requested to be presented with a media item concerning that feature, the data-processing system of the second arrangement being arranged to use data on the size of feature-specific aggregations of feature-type markers to provide, as said information item, information about the relative popularity of the features concerned.

**50.** (currently amended) Apparatus according to claim 26, wherein the second arrangement comprises a mobile device for enabling a further user in said space to request and be presented with said information item.